

ABSTRACT

A semiconductor device 39. The device includes an interposer 31 having two major surfaces. The first surface 311 includes patterned metal conductors and bond pads 351, and the second surface includes an array of solder balls 33. The device includes a semiconductor chip 30 having a top surface and a back surface, the back surface of the chip adjacent the interposer 31, and the top surface including a plurality of terminals. Also included is a layer of polymeric material 34 disposed on the first surface 311 of the interposer covering the area of the interposer over the solder ball array. At least a portion of the polymeric material layer is between the chip 30 and the interposer 31. The device further includes a plurality of electrical connections 35 between the chip terminals and the bond pads 351 on the interposer.